

AMENDMENTS TO THE CLAIMS

1 1. (Currently Amended) A document-generation process performed using a
2 computer system, the process comprising:
3 parsing a raw document to create an internal representation of the document;
4 reading a first-level transform from a transform database;
5 applying the first-level transform to the internal representation so as to create a
6 first-level document;
7 writing the first-level document to memory;
8 receiving a first request for a second-level document that depends from the first-
9 level document;
10 in response to the first request, reading a second-level transform from the
11 transform database;
12 in response to the first request, applying the second-level transform to the first-
13 level document so as to create a second-level document; and
14 writing the second-level document to memory.

1 2. (Previously Presented) A document-generation process as defined
2 in Claim 1, further comprising:
3 revising the raw document;
4 applying the first-level transform to the revised raw document so as to create a
5 revised first-level document;
6 writing the revised first-level document to memory; and
7 indicating that a then-existing second-level document is invalid.

1 3. (Original) A document-generation process as defined in Claim 2,
2 further comprising:
3 receiving a second request for the then-existing second-level document;
4 determining that the then-existing second-level document has been indicated
5 invalid;

6 applying the second-level transform to the revised first-level document so as to
7 create a revised second-level document; and
8 writing the revised second-level document to memory.

1 4. (Previously Presented) A document-generation process as defined
2 in Claim 1, further comprising:
3 receiving a request for a revised first-level transform;
4 revising the then-existing first-level transform;
5 applying the revised first-level transform to the raw document so as to create a
6 revised first-level document;
7 writing the revised first-level document to memory; and
8 indicating that the then-existing second-level document is invalid.

1 5. (Previously Presented) A document-generation process as defined
2 in Claim 4, further comprising:
3 receiving a second request for the then-existing second-level document;
4 determining that the then-existing second-level document has been indicated
5 invalid;
6 applying the second-level transform to the revised first-level document so as to
7 create a revised second-level document; and
8 writing the revised second-level document to memory.

1 6. (Original) A document-generation process as defined in Claim 1,
2 wherein a respective GID is assigned to each of the first-level document and the second-
3 level document.

1 7. (Original) A document-generation process as defined in Claim 1,
2 wherein the first-level document and the second-level document are timestamped and
3 wherein a document is deleted when a timestamp indicates that the document is stale.

1 8. (Currently Amended) A method of generating customized versions of a
2 document using a computer system, the method comprising:

3 storing the document in raw form;
4 parsing the document to create an internal representation of the document;
5 receiving a request to generate a second-level document; and
6 decomposing the document, wherein decomposing the document comprises
7 applying a first-level transform to the internal representation of the
8 document so as to create a first-level document and, in response to the
9 request to generate the second-level document, applying a second-level
10 transform to the first-level document so as to create [[a]] the second-level
11 document.

1 9. (Previously Presented) A method as defined in Claim 8, wherein applying
2 a first-level transform and applying a second-level transform comprises applying
3 sequential transforms to the document.

1 10. (Canceled)

1 11. (Canceled)

1 12. (Previously Presented) A method as defined in Claim 8, wherein
2 decomposing the document comprises applying a third-level transform to the second
3 level document so as to create a third-level document.

1 13. (Original) A method as defined in Claim 8, wherein the document is
2 stored in raw XML form.

1 14. (Previously Presented) A method as defined in Claim 13, wherein
2 applying a first-level transform and applying a second-level transform comprises
3 applying sequential transforms to the document.

1 15. (Previously Presented) A method as defined in Claim 14, wherein
2 applying a first-level transform of the document stored in raw XML form comprises

3 applying a subscription-level transform to the internal representation of the document so
4 as to create a subscription-level document.

1 16. (Previously Presented) A method as defined in Claim 15, wherein
2 the subscription-level transform enables content filtering of the internal representation in
3 accordance with a user's request.

1 17. (Previously Presented) A method as defined in Claim 16, wherein
2 applying a second-level transform comprises applying an organization-level transform to
3 the subscription-level document so as to create an organization-level document.

1 18. (Original) A method as defined in Claim 17, wherein the
2 organization-level transform enables subscription-specific content filtering of a
3 subscription-level document.

1 19. (Previously Presented) A method as defined in Claim 18, wherein
2 decomposing the document comprises applying a presentation-level transform to the
3 organization-level document so as to create a presentation-level document.

1 20. (Original) A method as defined in Claim 19, wherein the presentation-
2 level transform generates an organization-specific document for end user presentation.

1 21. (Original) A method as defined in Claim 20, wherein the presentation-
2 level transform generates an HTML document or a text file for end user presentation.

3 22. (Original) A method as defined in Claim 21, wherein the subscription-
4 level transform is mandatory and the organization-level and presentation-level transforms
5 are optional.

1 23. (Original) A method as defined in Claim 8, wherein a transform is
2 applied to a document only as a result of an initial demand for a transformed document.

1 24. (Original) A method as defined in Claim 23, wherein the demand for a
2 transformed document is a client request.

1 25. (Original) A method as defined in Claim 24, wherein the demand for a
2 transformed document is a document publication process.

1 26. (Original) A method as defined in Claim 23, wherein transformed
2 documents are written to a cache.

1 27. (Original) A method as defined in Claim 26, wherein demands for a
2 transformed document, subsequent to the initial demand, are referred to the cache.

1 28. (Currently Amended) A computer readable medium having data stored
2 therein to cause a data processing system to generate a data document according to a
3 process comprising:
4 storing a raw form of the document;
5 parsing the document to create an internal representation of the document; and
6 receiving a request from a client computer system coupled to the data processing
7 system to generate a second-level document into a particular form;
8 decomposing the document into ~~[[a]]~~ the form requested by ~~a recipient of the~~
9 ~~document~~ the client system, wherein decomposing the document
10 comprises applying a first-level transform to the internal representation of
11 the document so as to create a first-level document and, in response to the
12 request to generate the second-level document, applying a second-level
13 transform to the first-level document so as to create a second-level
14 document.

1 29. (Previously Presented) A computer readable medium as defined in
2 Claim 28, wherein applying a first-level transform and applying a second-level transform
3 comprises applying sequential transforms to the document.

1 30. (Previously Presented) A computer readable medium as defined in
2 Claim 28, wherein the document is stored in XML form.

1 31. (Previously Presented) A computer readable medium as defined in
2 Claim 30, wherein the document stored in XML form is parsed by an XML parser to
3 create the internal representation.

1 32. (Previously Presented) A computer readable medium as defined in
2 Claim 31, wherein the internal representation level of the document is transformed to a
3 subscription-level document by applying a subscription-level transform to the internal
4 representation.

1 33. (Previously Presented) A computer readable medium as defined in
2 Claim 32, wherein application of the subscription level transform to the internal
3 representation so as to create a subscription-level document is required.

1 34. (Previously Presented) A computer readable medium as defined in
2 Claim 32, wherein the subscription-level document is transformed into an organization-
3 level document by applying an organization-level transform to the subscription-level
4 document.

1 35. (Previously Presented) A computer readable medium as defined in
2 Claim 34, wherein application of the organization-level transform to the subscription-
3 level document so as to create an organization-level document is optional.

1 36. (Previously Presented) A computer readable medium as defined in
2 Claim 34, wherein the internal representation of the document is decomposed to a
3 transform-level document only in response to a request for a transform-level document.

1 37. (Previously Presented) A computer readable medium as defined in
2 Claim 36, wherein transformed documents are written to a cache.

1 38. (Previously Presented) A computer readable medium as defined in
2 Claim 37, wherein an initial request for a transformed document causes decomposition of
3 the internal representation into the form requested and wherein subsequent requests for a
4 transformed document causes the transformed document to be retrieved from memory.

1 39. (Previously Presented) A computer readable medium as defined in
2 Claim 29, wherein the data document is generated according to a process comprising:
3 tracking the dependencies of a transformed document; and
4 regenerating the transformed document when any dependency related to the
5 document changes.

1 40. (Currently Amended) A computer readable medium as defined in Claim
2 39, wherein the document is generated according to a process comprising:
3 designating a cached version of the document invalid when any dependency
4 related to the document changes, and
5 regenerating the transformed document in response to a request ~~form~~ for the
6 document that is made after the dependency change.

1 41. (Previously Presented) A computer readable medium as defined in
2 Claim 40, wherein the document is stored in XML form.

1 42. (Previously Presented) A computer readable medium as defined in
2 Claim 39, wherein the document stored in XML form is parsed by an XML parser to
3 create the internal representation.

1 43. (Currently Amended) A computer readable medium as defined in Claim
2 42, wherein the internal representation level of the document is transformed to a
3 subscription-level document by applying a subscription-level ~~transform~~ transform to the
4 internal representation.

1 44. (Previously Presented) A computer readable medium as defined in
2 Claim 43, wherein application of the subscription level transformed to the internal
3 representation so as to create a subscription-level document is required.

1 45. (Previously Presented) A computer readable medium as defined in
2 Claim 43, wherein the subscription-level document is transformed into an organization-
3 level document by applying an organization-level transform to the subscription-level
4 document.

1 46. (Previously Presented) A computer readable medium as defined in
2 Claim 45, wherein application of the organization-level transform to the subscription-
3 level document so as to create an organization-level document is optional.

1 47. (Previously Presented) A computer readable medium as defined in
2 Claim 45, wherein the internal representation of the document is decomposed to a
3 transform-level document only in response to a request for a transform-level document.

1 48. (Previously Presented) A computer readable medium as defined in
2 Claim 47, wherein transformed documents are written to a cache.

1 49. (Canceled)

1 50. (Canceled)

1 51. (Canceled)

1 52. (Canceled)

1 53. (Previously Presented) A method of generating customized versions
2 of a document using a computer system, the method comprising:
3 storing the document in a primitive form;

4 transforming the document from primitive form into an internal representation of
5 the document;
6 transforming the internal representation into at least one subscription-level
7 document, into a DEFAULT organization-level document and into at least
8 one user-specific organization-level document;
9 transforming the DEFAULT organization-level document into at least one
10 presentation-level document; and
11 transforming the user-specific organization-level document into at least one
12 presentation-level document.

1 54. (Original) A method of generating customized versions of documents
2 as defined in Claim 53, wherein the user-specific organization-level document is
3 transformed into at least two presentation-level documents.

1 55. (Original) A method of generating customized versions of documents
2 as defined in Claim 54, wherein the user-specific organization-level document is
3 transformed into an HTML presentation-level document and into a FLAT presentation-
4 level transform.

1 56. (Original) A method of generating customized versions of a document
2 as defined in Claim 53, wherein:
3 (i) the internal representation is transformed into a first subscription-level
4 document and into a second subscription-level document;
5 (ii) the first subscription level document is transformed into a subscription-level
6 specific DEFAULT organization-level document and into at least one
7 user-specific organization-level document; and
8 (iii) the second organization-level document is transformed into a subscription-
9 level-specific DEFAULT organization-level document.

1 57. (Original) A method of generating customized versions of a document
2 as defined in Claim 56, wherein the document is stored in XML form.

1 58. (Currently Amended) A system for the generation of customized data
2 documents, the system comprising:
3 first database ~~means~~ for storing raw data documents;
4 first tabular means for storing document records;
5 an interface coupling the first database ~~means~~ to the first tabular means;
6 a request interface to receive a document generation request, wherein the
7 document generation request indicates a particular document type;
8 second database ~~means~~ for storing a compilation of transforms that enable an
9 internal representation of a document to be transformed into a first-level
10 document and that enable the first-level document to be transformed into a
11 second-level document, wherein each transform is mapped to a particular
12 document type;
13 a document generator, coupled to the first and second databases and first and
14 second tabular means, and to the request interface, to generate the first
15 level document using at least one of the transforms and to generate the
16 second-level document using at least one of the transforms in response to
17 receipt of the document generation request, wherein the document type of
18 the second-level document and the transform used to generate the second-
19 level document are indicated by the document generation request;
20 second tabular means for storing transform records; and
21 an interface coupling the second database ~~means~~ to the second tabular means.

1 59. (Original) A system as defined in Claim 58, further comprising:
2 a cache coupled to the first tabular means and to the second tabular means.

1 60. (Currently Amended) A system as defined in Claim 58, wherein the
2 second database ~~means~~ stores a compilation of transforms that enable:
3 transforming an internal representation into at ~~least~~ least one subscription-level
4 document, into a DEFAULT organization-level document and into at least
5 one user-specific organization-level document;

6 transforming the DEFAULT organization-level document into at least one
7 presentation-level document; and
8 transforming the user-specific organization-level document into at least one
9 presentation-level document.

1 61. (Currently Amended) A system as defined in Claim 60, wherein the
2 second database ~~means~~ stores a compilation of transforms that enable:
3 (i) the internal representation to be transformed into a first subscription-level
4 document and into a second subscription-level document;
5 (ii) the first subscription level document to be transformed into a subscription-
6 level specific DEFAULT organization-level document and into at least
7 one user-specific organization-level document; and
8 (iii) the second organization-level document to be transformed into a subscription-
9 level-specific DEFAULT organization-level document.

1 62. (Original) A system as defined in Claim 61, further comprising:
2 a cache coupled to the first tabular means and to the second tabular means.

1 63. (New) A document-generation process as defined in Claim 1 wherein
2 receiving a first request for a second-level document that depends from the first-level
3 document comprises:
4 receiving a first request from a client computer coupled to the computer system
5 for a second-level document that depends from the first-level document

1 64. (New) A document-generation process as defined in Claim 1 further
2 comprising:
3 tracking the dependencies of a transformed document, wherein the transformed
4 document includes at least one of the first-level document and the second-
5 level document and the dependencies include the first-level document and
6 the internal representation; and
7 regenerating the transformed document when any dependency related to the
8 document changes.

1 65. (New) A method of generating customized versions of a document using
2 a computer system as defined in Claim 8 wherein receiving a request to generate a
3 second-level document comprises:

4 receiving a request from a client computer coupled to the computer system to
5 generate a second-level document.

1 66. (New) A method of generating customized versions of a document using
2 a computer system as defined in Claim 8 further comprising:

3 tracking the dependencies of a transformed document, wherein the transformed
4 document includes at least one of the first-level document and the second-
5 level document and the dependencies include the first-level document and
6 the internal representation; and
7 regenerating the second-level document when any dependency related to the
8 transformed document changes.

1 67. (New) A method of generating customized versions of a document using
2 a computer system as defined in Claim 53 wherein receiving a request to generate a
3 second-level document comprises:

4 receiving a request from a client computer coupled to the computer system to
5 generate a second-level document.

1 68. (New) A method of generating customized versions of a document using
2 a computer system as defined in Claim 53 further comprising:

3 tracking the dependencies of the transformed documents, wherein the transformed
4 documents include the subscription-level document, the DEFAULT
5 organization-level document, the user-specific organization-level
6 document, the presentation-level documents, and the dependencies include
7 the DEFAULT organization-level document, the user-specific
8 organization-level document, and the internal representation; and
9 regenerating the second-level document when any dependency related to the
10 transformed document changes.

1 69. (New) A method of generating customized versions of a document using
2 a computer system as defined in Claim 53 wherein receiving a request to generate a
3 second-level document comprises:

4 receiving a request from a client computer coupled to the computer system to
5 generate a second-level document.

1 70. (New) A system for the generation of customized data documents as
2 defined in Claim 58 further comprising:

3 a document dependency tracker and regenerator, coupled to the first and second
4 databases and first and second tabular means, to track the dependencies of
5 a transformed document, wherein the transformed document includes at
6 least one of the first-level document and the second-level document and
7 the dependencies include the first-level document and the internal
8 representation and to regenerate the transformed document when any
9 dependency related to the document changes.